Application Serial No. 10/561,724
Attorney Docket No. 10191/4458
Reply to Final Office Action of September 10, 2009

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application.

LISTING OF THE CLAIMS:

- 1-6. (Canceled).
- 7. (Currently Amended) A method for predicting a remaining lifetime of an electric energy storage mechanism, the method comprising:

adapting continuously a parameter of a mathematical model of the energy storage mechanism to a real value over the lifetime of the energy storage mechanism;

adapting the mathematical model with the adapted parameter;

performing extrapolation via the mathematical model;

determining at regular intervals the remaining lifetime based on the extrapolation, wherein the parameter of the mathematical model is adapted with the adapted parameter between the regular intervals, and wherein the remaining lifetime is defined as a time until reaching any definable limiting values for one of a minimum efficiency and a minimum storage capacity;

indicating the remaining lifetime; and

when a level falls below a preselectable threshold for the remaining lifetime, providing a warning.

- 8. (Canceled).
- 9. (Previously Presented) The method as recited in Claim 7, further comprising:

calculating and storing at least one of a value for an efficiency of the energy storage mechanism and a value for a storage capacity of the energy storage mechanism at regular intervals on the basis of the mathematical model.

- 10. (Previously Presented) The method as recited in Claim 9, wherein the at least one of the value for the efficiency of the energy storage mechanism and the value for the storage capacity of the energy storage mechanism are based on at least one of a specifiable charge state and a temperature.
- 11. (Previously Presented) The method as recited in Claim 10, wherein the remaining lifetime is determined by extrapolation from the at least one of the value for the efficiency of

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the energy storage mechanism and the value for the storage capacity of the energy storage mechanism and from a minimum value required for a particular application.

12. (Currently Amended) A device for predicting a remaining lifetime of an electric energy storage mechanism, comprising:

a display;

a memory; and

a processor, wherein the processor is programmed to perform the following:

adapting continuously a parameter of a mathematical model of the energy

storage mechanism to a real value over the lifetime of the energy storage mechanism;

adapting the mathematical model with the adapted parameter;

performing extrapolation via the mathematical model;

determining at regular intervals the remaining lifetime based on the extrapolation, wherein the parameter of the mathematical model is adapted with the adapted parameter between the regular intervals, and wherein the remaining lifetime is defined as a time until reaching any definable limiting values for one of a minimum efficiency and a minimum storage capacity;

indicating the remaining lifetime; and
when a level falls below a preselectable threshold for the remaining lifetime,
providing a warning.

- 13. (Previously Presented) The method as recited in Claim 7, wherein the electric energy storage mechanism includes a battery in a motor vehicle.
- 14. (Previously Presented) The method as recited in Claim 9, further comprising:

 providing a warning when a level falls below a preselectable threshold for at least one of the efficiency of the energy storage mechanism and the storage capacity of the energy storage mechanism.
- 15. (Previously Presented) The device as recited in Claim 12, wherein at least one of a value for an efficiency of the energy storage mechanism and a value for a storage capacity of the energy storage mechanism at regular intervals is determined based on the mathematical model and stored, wherein the at least one of the value for the efficiency of the energy storage mechanism and the value for the storage capacity of the energy storage mechanism are based on at least one of a specifiable charge state and a temperature, and wherein the remaining

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lifetime is determined by extrapolation from the at least one of the value for the efficiency of the energy storage mechanism and the value for the storage capacity of the energy storage mechanism and from a minimum value required for a particular application.

16. (Previously Presented) The method as recited in Claim 7, further comprising:

calculating and storing at least one of a value for an efficiency of the energy storage mechanism and a value for a storage capacity of the energy storage mechanism at regular intervals on the basis of the mathematical model; and

providing a warning when a level falls below a preselectable threshold for at least one of the efficiency of the energy storage mechanism and the storage capacity of the energy storage mechanism;

wherein the at least one of the value for the efficiency of the energy storage mechanism and the value for the storage capacity of the energy storage mechanism are based on at least one of a specifiable charge state and a temperature,

wherein the remaining lifetime is determined by extrapolation from the at least one of the value for the efficiency of the energy storage mechanism and the value for the storage capacity of the energy storage mechanism and from a minimum value required for a particular application, and

wherein the electric energy storage mechanism includes a battery in a motor vehicle.